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Residents' preferences for walkable neighbourhoods

Abstract

The 'walkable neighbourhood' is promoted by planners and designers as a normative goal yet resident responses to this environment, the ultimate occupants of these settings, remain unclear. Completing focus groups with 11 diverse residents' groups, a critically understudied politically engaged population which often seeks to shape planning practice, this paper unpacks residents' environmental preferences and examines their relationship to neighbourhood attributes commonly associated with walking. Five dominant preferences relating to local amenities, social interaction, noise, greenspace and density were identified. Positive interactions between these and the considered attributes suggest that groups might find much to like in the walkable neighbourhood. The implications for delivering walkable neighbourhoods are considered.

Keywords: walkable neighbourhood, planning, New Urbanism

Introduction

Walkable neighbourhoods, i.e. neighbourhoods that encourage walking (Lee and Talen 2014), are promoted as a normative goal by planners and policymakers (Cozens and Hillier 2008), by international bodies such as the World Health Organisation (WHO) (Edwards and Tsouros, 2006) and the United Nations (UN) (UN-Habitat, 2014) and by influential models of urbanism, especially New Urbanism (Talen 2013) and Smart Growth (Downs, 2005). A walkable neighbourhood is typically seen to comprise of high density,

compact, mixed use, amenity rich, transit-orientated development, good pedestrian infrastructure and pedestrian-orientated streets (Lee and Talen 2014, Carmona et al., 2010, Calthorpe, 1993, Duany et al., 2010). It has been suggested, and some evidence indicates, that this development pattern provides multiple benefits including increased physical activity (Frank et al. 2010), reduced carbon emissions (Coupland, 1997), less congestion, better air quality, less sprawl, a 'richer public domain' (Calthorpe, 1993) and greater social capital (Leyden, 2003). The evidence for some of these benefits is, however, contested whilst various negative outcomes, such as increased vulnerability to crime, have been associated with this approach to neighbourhood design (Cozens and Hillier, 2008).

Resident responses to the walkable neighbourhood are a crucial, though uncertain, matter (Smith and Billig, 2012). Indeed, Breheny (1997) argues that the possibility of realising this urban form might 'turn' on its appeal to residents. Many studies (Breheny, 1997; Leishman et al. 2004), plus sections of the development industry (Fulford, 1996; Michelson, 1977), have identified amongst residents a strong preference for low density, single use residential environments. However, more recently, evidence is accumulating of support for elements of the walkable neighbourhood (Song and Knaap, 2003; Leinberger and Alfonzo, 2012; Handy et al. 2008).

Set against this background, the aim of this paper is to build understanding of residents' preferences for walkable neighbourhoods. It addresses this guiding aim by first unpacking residents' environmental preferences and then examining their relationship to commonly understood components of the walkable neighbourhood.

The paper focuses on a specific type of resident – the members of residents’ groups. Consequently, it provides insights into how a population which frequently seeks to shape local planning regimes (Healey et al., 1988; Short et al., 1986; Saunders, 1980, Scott et al., 2007, Linowes and Allensworth, 1973; Purcell, 2001), evaluates an urban form increasingly promoted by these regimes. This focus introduces a critically understudied yet locally vocal perspective into debates on the (im)possibility of compact communities. Limited research on residents’ groups means that we know little about their environmental preferences (or indeed their structure, activities, interests and concerns). Purcell’s (2001) study of relatively affluent, suburban residents’ groups in North America offers the most exhaustive account of these preferences, but the transferability of his findings to the wider population of groups seems questionable. Creating opportunities to extrapolate findings to a range of contexts and cases, this paper considers the environmental preferences of 11 diverse residents’ groups operating in a variety of environmental settings within the city of Southampton in South East England. Working in Southampton provided access to a large population of residents’ groups operating in more and less walkable environments creating scope to consider possible associations between an area’s walkability and a group’s potential amenability to more walkable neighbourhoods (Handy et al., 2006).

The paper is divided into six sections. First, the concept of the walkable neighbourhood is introduced. A review of the existing empirical evidence on residents’ and residents’ groups’ preferences for walkable neighbourhoods follows. The research method is presented followed by a results section, which sets out the study’s key findings on residents’ groups’ environmental preferences, and a discussion section, which considers how these preferences relate to commonly understood components of the walkable neighbourhood.

Finally, the conclusions summarise the paper's key findings and reflect on the implications for delivering walkable neighbourhoods.

Defining a walkable neighbourhood

The walkable neighbourhood, as the term implies, is a neighbourhood which supports and encourages walking (Lee and Talen 2014). Evidence suggests that walking is associated with various physical characteristics and urban design factors (Ghel, 2011, 2010; Frank et al. 2010, Lee and Talen 2014, Saelens et al. 2016, Sallis et al. 2006) and so neighbourhoods which feature these items might be considered more 'walkable' than those which do not. Proximity, referring to the distance between housing and destinations (facilities, amenities, places of work), and connectivity, referring to the choice, accessibility and directness of routes to destinations, have consistently been associated with walking (Owen et al. 2007), and have been highlighted as influences on where people choose to walk - Gehl (2011, 2010) found that pedestrians favour short, direct routes and prefer to walk no further than 500 meters in ordinary daily situations. These two 'qualities' are facilitated by a compact urban form, mixed land uses, higher densities and a dense interconnected street pattern (Owen et al. 2007, Cozens and Hillier 2008, Saelens et al. 2016). Many studies report links between these items and walking (Ghel, 2010, 2011; Sallis et al. 2006, Saelens et al., 2016). When studied, good pedestrian infrastructure, encompassing such items as continuous well-maintained, spacious pavements free from obstructions, is often associated with walking (Saelens et al., 2016, Booth et al. 2000; Gehl, 2010), and a positive experience when walking (Gehl, 2010), whilst some evidence points to links between greenspace and walking (Astell-Burt et al. 2013). Albeit regularly identified in research, not all studies find these relationships and, even in those that do, they are not always statistically significant (Owen et al. 2004). Further, the

issue of self-selection, i.e. the possibility that individuals who prefer walking select to live in areas that are more conducive to walking, seems able to explain associations between some environmental factors and walking; although some evidence indicates that certain factors relate to walking even when this issue is taken into account (Handy et al., 2006). Lastly, rather than finding consistent relationships, studies indicate that different factors matter to different populations and for different walking behaviours (Owen et al. 2004; Humpel et al. 2004).

The appeal of walkable neighbourhoods to residents and residents' groups

Evidence increasingly points to selective support for commonly identified attributes of the walkable neighbourhood. This support is selective both in terms of *what* is supported and *who* is supportive.

Beginning with *what* is supported, a clear preference for walkable amenities located close to housing, alongside a strong dislike for high density development, is reported in many recent studies (Song and Knaap, 2003; Koster and Rouwendal, 2012; Levine and Frank, 2007; Lewis and Baldassare, 2010; Morrow-Jones et al., 2004). Preferences for convenient access to public transport, better street connectivity (Song and Knaap, 2003), space for walking and cycling (Levine and Frank, 2007) and short commuting times (Morrow-Jones et al, 2004) have been reported in a few studies whilst a couple report support for a whole sweep of walkable neighbourhood characteristics. Tu and Eppli (1999 and 2001), for instance, found that buyers were prepared to pay a premium for homes in higher density, mixed use, pedestrian-friendly neighbourhoods relative to similar homes in more conventional suburban settings.

In terms of *who* supports walkable neighbourhoods, certain socioeconomic and demographic variables including age, tenure, income, educational attainment and household composition, particularly the presence of children, plus some pre-existing attitudes and orientations, seem associated with more or less positive dispositions to this development pattern (Liao et al., 2014; Yang and O'Neill, 2014; Smith and Billig, 2012; Handy et al., 2008). Liao et al. (2015) found that families with fewer school-age children, low-income households and renters, plus individuals who valued social heterogeneity and had less desire for privacy, were most likely to display strong preferences for walkable neighbourhoods, whilst Lewis and Baldassare (2010) highlighted the importance of ideological position with self-identified conservatives demonstrating lower levels of support for walkable neighbourhoods than their moderate and liberal counterparts.

Juxtaposed with the above, strong support for single use, low density suburban environments is a constant theme across numerous studies (Breheny, 1997; Leishman et al. 2004; Smith and Billig, 2012; Downs, 2005; Myers and Gearin, 2001; Filion et al., 1999). The larger homes and gardens, family-friendly services, spaciousness, peace and quiet and lower levels of real/perceived crime of the suburbs are reported to attract and retain residents (Mace et al., 2007, Breheny, 1997; Couch and Karecha, 2006). Decades of suburban population growth and urban population loss in places like America, Australia, Canada and the UK is seen by some as demonstrable evidence of an entrenched 'suburban preference' (Williams, 1999; Gordon and Richardson, 1997; Rowley, 1996; Filion et al., 1999). Others, though, reject the suggestion that suburban population growth is a direct reflection of households' locational preferences arguing that at least part of this growth is due to individuals lacking alternative housing choices to the 'traditional' suburb and, if available,

would prefer higher density, mixed use, transit-orientated environments (Levine, 2006; Levine and Frank, 2007).

To turn now to residents' groups' and their preferences for walkable neighbourhoods. Residents' groups can be defined as voluntary, non-party political, place-based organisations that profess to operate to protect and promote the perceived interests of their area of activity (Saunders, 1980; Short et al., 1986; Davis, 1991). Members tend to reflect one another, but differ from the wider population, on various measures including tenure, age and length of residence being disproportionately owner-occupiers, older and long-term/established residents (Short et al., 1986; Scott et al., 2007). Residents' groups may seek to influence, to varying degrees of success, local government planning and development decisions (Short et al., 1986, Linowes and Allensworth, 1973) and indeed their inception is usually a response to an unpopular development or planning decision with groups originating and operating to repel this perceived 'threat' (Davis, 1991; Saunders, 1980; Short et al, 1986).

Whilst not assuming that residents' groups collectively and necessarily hold similar environmental preferences, analysis of their interventions on, or responses to, various planning matters indicates that certain shared environmental interests might exist. Groups seem to dislike new development and environmental change whilst they strongly favour retaining and preserving existing environments. Groups have protested or objected to rapid development (Scott et al. 2012), new housing development (Short et al., 1986), urban intensification (Davison et al., 2012), the development of greenspace (Saunders, 1980) and processes of social and environmental change related to large numbers of students moving into established residential areas (Hubbard 2008). Conversely, they have intervened to support moratoriums on development (Short et al., 1986) and the protection of greenspace

(Saunders, 1980). Purcell (2001), though, argues that, rather than these somewhat simplistic preferences, residents' groups hold a complex set of interrelated environmental interests. These groups, he claims, form and operate to translate, within their locale, a normative spatial vision into reality. Consisting of a preponderance of single family detached houses set within large plots, low density development, plentiful greenspace, limited traffic, peace and quiet, a slow pace of life and minimal commercial activity, Purcell (2001) termed this vision the 'suburban ideal'. Finding support for this 'ideal' amongst the groups Purcell (2001) studied – homeowner groups from relatively affluent suburban areas in North America - is somewhat unsurprising. To satisfy a pre-existing preference group members might have intentionally moved to a suburban environment. Conscious of this issue, the study reported here purposively sampled diverse residents' groups operating in a variety of environmental settings.

Research design

Method: focus groups (Krueger and Casey, 2000) were completed with 11 residents' groups operating across varied neighbourhoods in Southampton, a mid-sized city on England's South Coast (see Research context). The format, strengths and limitations of focus groups are well documented (see Whelan et al., 2002; Bloor et al., 2001; Krueger and Casey, 2000). The successful use of focus groups to explore residents' environmental preferences in past research influenced the choice of method. Fillion et al. (1999) used focus groups to explore residents' preferences for existing housing and residential location options whilst Howley et al. (2009) used focus groups to explore favoured residential locations amongst city centre residents. Further, with focus groups thought especially suited to the study of attitudes,

they seemed well matched to the study's interest in exploring participants' attitudes to the environment (Kitzinger, 1995).

Acting as moderator, the author steered the focus group discussions to explore preferences on land use and the design and layout of neighbourhoods, and of larger areas including towns and cities. The issues investigated reflected the concerns of a larger study on land use mix in urban environments within which the focus groups occurred. In discussing these issues, participants were encouraged to reflect on their own neighbourhood, other neighbourhoods within Southampton, the wider city of Southampton and other real or hypothetical towns, cities and urban environments.

Besides discussion, the focus groups involved a simple hands-on activity (Krueger and Casey, 2000) where participants, working as a group, designed their 'ideal' town/city. The interest in the town/city scale stemmed from the concerns of the larger study whilst the activity was kept intentionally simple to support inclusive participation. Participants placed coloured discs representing different land uses (housing, education, health, employment, leisure, greenspace, retail, office and waste management) onto a large base sheet that showed, as a circle, the boundary of a settlement. The completed ideal town/city was then used as a prompt and support for discussion on land use preferences, attitudes to development density, development patterns and urban design.

Each focus group lasted approximately 1.5 hours and was audio-recorded with the recordings then transcribed. Field notes were made within and immediately after each focus group capturing information on group interaction, group setting and volunteered information on participant characteristics (Barbour, 2007).

Sample and recruitment: Using purposive sampling, 11 diverse residents' groups, differing on such measures as size, years of activity and origins, were recruited to the study from a wide variety of neighbourhoods located across Southampton. Table 1 describes the groups and their areas of activity including their degree of walkability (rated as good, fair or poor) as determined through application of the FASTVIEW audit tool. Explained in detail in Griew et al. (2013), this desk based tool uses Google Street View™ to measure street characteristics hypothesised to influence walking behaviours. Nine categories of neighbourhood characteristics are measured including pavement surface quality, lighting and kerb paving quality. Noting their frequent association with walking, 'mixed land uses', 'street connectivity' and 'density' were included as additional categories. A composite score was determined based on an area's performance across all categories. It was assumed that if similar preferences were identified across diverse groups these might suggest the presence of central shared land use preferences common to many residents' groups (Patton, 1990). Whilst diverse, the assembled sample displayed some unintended bias towards groups operating in affluent suburban areas principally because these groups proved most willing to participate in the study. Groups were identified through online searches and analysis of community group directories, contact with local elected members, council officers working on community involvement and support and local voluntary and charitable organisations.

Table 1: Residents' groups and their areas of activity

Item	Unit	A	B	C	D	E	F	G	H	I	J	K	Southampton
Quality of fit: OA to group boundaries ^a		Poor	Ok	Good	Good	Good	Good	Ok	Poor	Poor	Poor	Poor	
All usual residents	Pers.	1,195	1,352	5,254	7,944	4,313	3,582	864	328	499	290	262	236,882
Area's walkability ^b		Good	Good - Fair	Fair	Good	Good - Fair	Good	Fair - Poor	Good	Fair	Fair - Poor	Fair	
Flat, maisonette or apartment	Hh. Spaces	89%	29%	40%	44%	5%	47%	26%	77%	2%	2%	62%	40%
Terraced dwelling	Hh. Spaces	7%	50%	2%	10%	16%	24%	11%	17%	34%	2%	0%	21%
Semi-detached dwelling	Hh. Spaces	3%	15%	32%	29%	73%	21%	6%	6%	44%	8%	9%	26%
Detached dwelling	Hh. Spaces	1%	6%	26%	17%	6%	8%	57%	1%	20%	87%	29%	13%
Higher managerial, admin. & professional occupations ^c	Pers.	21%	32%	23%	36%	24%	18%	61%	58%	57%	67%	57%	36%
Intermediate occupations ^c	Pers.	21%	15%	6%	7%	13%	5%	16%	9%	19%	12%	10%	14%
Routine & manual occupations ^c	Pers.	38%	43%	10%	9%	31%	13%	12%	19%	16%	11%	14%	27%
Never worked & long-term unemployed ^c	Pers.	12%	5%	3%	2%	7%	3%	3%	3%	2%	1%	2%	5%
Not Classified ^d	Pers.	9%	5%	59%	46%	24%	60%	9%	12%	7%	9%	18%	18%
Private rented	Hhs.	24%	6%	32%	41%	24%	69%	16%	32%	7%	4%	25%	25%

Social rented	Hhs.	61%	47%	16%	8%	35%	7%	11%	16%	8%	3%	3%	23%
Owner-occupier	Hhs.	13%	45%	51%	50%	40%	23%	73%	51%	83%	92%	71%	51%
Living rent free	Hhs.	2%	1%	1%	1%	2%	1%	1%	1%	1%	0%	1%	1%
Resident group size		All Hhs in area	All Hhs in area	220 Hhs.	500 Hhs	All Hhs in area	All Hhs in area	190 Hhs	40-50 members	200 Hhs	82 Hhs	All Hhs in area	
Year established or yrs. active in 2011 (when focus groups took place)		7 yrs.	8 yrs.	Early 1990s	Early 1980s	Disbanded 2005, reformed in 2009	1 yr.	2 yrs.	Early 1980s	19 yrs.	Group uncertain of yrs. active &/or yr. formed	Group uncertain of yrs. active &/or yr. formed	
Number of pers. per focus group	Pers.	4	5	3	3	3	6	9	2	5	4	2	
Resident group interests		Similar interests across groups - planning, development, local environmental quality, litter, noise and parking. Several groups (esp. A, C, D, F and K) were also concerned about the perceived impact of large numbers of university students moving into their areas. All groups were, at times, politically and/or locally active e.g. they commented on planning applications, lobbied councillors, responded to council consultations, hosted community events, met with community safety officers and council officers											

Notes and abbreviations

Pers. = Persons

Hhs. = Households

Hh. Spaces = Household Spaces

^a Data was collected at Output Area (OA) level. May not always sum to 100% due to rounding. The table comments on the quality of fit between the OA boundaries and the spatial boundaries of the residents' groups.

^b Walkability assessed using the FASTVIEW audit tool

^c Refers to categories within the National Statistics socio-economic classification (5 class version) - an occupationally based classification.

^d Class encompasses: Full-time students, Occupations not stated or inadequately described and Not classifiable for other reasons.

Participants: Within each group, members of the management committee were invited to participate in a focus group. This committee constituted a group's proactive core with members responsible for most organisational and administrative duties and decision-making (Short et al, 1986; Saunders, 1980). Liable to set the group's agenda on planning and development matters, it was thought interesting to focus exclusively on the preferences of this sub-group. Participation in the focus groups ranged from 2 to 9 people (see Table 1). Overall, 46 individuals took part; approximately 50% were male and 50% female. In reporting the findings all participants were provided with pseudonyms. Whilst detailed demographic data were not collected, participants volunteered information that indicated most conformed to the 'typical' profile of a residents' group member. Participants tended to be older, many identified themselves as retirees, established residents and homeowners.

Analysis: Using NVivo (Bazeley and Jackson, 2013), an inductive thematic analysis (Joffe and Yardley, 2004) was performed on the transcripts. Analysis began with line-by-line coding (Beesley et al. 2011). As this process progressed, sub-codes added richness, depth and nuance to the analysis whilst organising themes emerged through the grouping together of related codes to form categories and related categories to form broad themes. This process uncovered five dominant environmental preferences. These preferences were mentioned frequently and emphatically across and within groups.

Research context: With a population of some 236,900 (Office for National Statistics (ONS), [n.d]), Southampton is the third largest city in South East England outside London (Southampton City Council, 2010). It presents, and promotes through planning and urban design policy, a development pattern that features many environmental attributes associated with walking such as mixed land uses, higher densities, transit-orientated development and

permeable street patterns. Residential areas are varied and include neighbourhoods of tightly packed terraced housing, leafy mature inner suburbs featuring large detached and semi-detached villas, low density outer suburbs, Radburn style estates, Garden City style estates and areas of traditional semi-detached suburban housing. These environments present high to low levels of walkability. Table 1 provides selected demographic data for the city.

Results: Residents' groups' environmental preferences

There was surprising similarity across the 11 residents' groups in terms of liked and disliked environments and environmental factors. Five dominant preferences relating to local service provision, noise, social interaction, greenspace and density were mentioned frequently and emphatically across and within all groups. These five preferences, summarised in Table 2, are the focus of this section.

Table 2: Residents' groups' five dominant environmental preferences

Preference	Brief details
Walkable amenities	Amenities and facilities serving a local need should be provided within a 10 to 15 minute walk of housing.
Peaceful environments	Housing should be separated from 'noisy' uses such as bars, leisure facilities and large shops.
Sociable spaces	The design of the built environment should facilitate social interaction by providing spaces, uses and destinations that allow/encourage individuals to meet.
Leafy locales	Neighbourhoods should include plentiful areas of public and private greenspace.
Lower densities	Detached and semi-detached housing should dominant within neighbourhoods, with flats and tightly packed houses providing no private outdoor space avoided.

Walkable amenities

Residents' groups favoured providing a selection of services and facilities addressing a local need, such as a corner shop, within a walkable distance, but not the immediate vicinity, of housing: "we would like all these facilities but we'd like them handy but not on our doorstep" (Kathy, Group A). Participants wanted their homes to be 'insulated' from the perceived disturbance – noise, traffic, parking, anti-social behaviour – of non-residential uses by a 'buffer' of residential properties. Although groups differed in the preferred 'depth' of this buffer, as measured by the time taken to walk across it, overall the majority preference was for one that would take 10 to 15 minutes to cross on foot.

Distinct from the other groups, Groups J and G, which operated in exclusively residential, less walkable areas remote from most facilities, felt it preferable to position almost all everyday services a car journey away commenting, "we don't need, we don't wish to have them [amenities/services] close because we get in our cars" (Thomas, Group G). These groups qualified their comments by noting that all group members, and all residents within their areas, owned a car. Other groups actively disliked this reliance on the car with most participants valuing the opportunity to walk to nearby facilities. Going further, a few, especially those operating within more walkable areas, favoured locating unobtrusive employment uses within walking distance of homes praising the idea of being able to walk to work. Unsurprisingly, then, personal preferences for walking seemed important in explaining preferences for walkable amenities.

Underpinning the preference to locate primary schools, health centres and the occasional shop in residential areas seemed to be an expectation that these facilities were

inevitably found in these areas, “when you’re talking about schools right, primary schools are expected to be local” (Dorothy, Group C). Expectations about the type of land uses which ought to be present in residential and other areas shaped, then, attitudes towards neighbourhood design. At times these expectations appeared to rest on perceived norms in the wider built environment, and participants’ experiences within, and familiarity with, their local (i.e. Southampton’s) built environment.

A preference for ‘convenience’ was often associated with the interest in walkable amenities, particularly walkable retail facilities. A “handy” local shop (Suzanne, Group D) was widely appreciated with groups generally finding it far preferable for everyday essentials to be available in a shop a walk away rather than a car journey away. Beyond this being simply more convenient, in Group E reducing car-based travel was itself an argument for providing small shops near housing. Mirroring arguments made for walkable neighbourhoods in policy (Coupland, 1997; Downs, 2005), it was reported that local service provision could reduce travel and this in turn could lower carbon emissions. For those groups favouring a clear separation between housing and non-residential uses such environmental concerns were absent from discussion.

Peaceful environments

Whether operating in quiet outlying suburbs, higher density mixed use city centre locations, or in places where participants identified noisy uses or occupants, groups all strongly favoured peaceful environments. For some, the pursuit of such an environment had drawn them to their current home and/or area. For groups operating in areas with noisy uses, noise was a concern. On occasion, such concerns had led to local political action with Group

D strongly objecting to the council, partly on the grounds of late night noise, when an application to extend the opening hours of a local bar came forward. Finding a strong preference for peace and quiet was unsurprising given the profile of the focus group participants. Most were older adults and previous research has found a clear preference for peace and quiet amongst this age group (Day 2008).

Uses such as offices, hotels, supermarkets, nightclubs, industry, warehousing and waste management were opposed in residential areas partly because they were assumed to introduce unwelcome noise. Additionally, they were considered potential generators of traffic, pollution, parking problems and anti-social behaviour. In some groups, generally those operating in less walkable areas, extreme separation between housing and such uses was favoured. Group G, for instance, debated the merits of an ideal town where one half contained only housing and the other half only non-residential uses. Concerns over noise and other forms of disturbance meant that some separation between housing and even some small-scale, everyday uses was favoured by most groups.

Sociable spaces

Groups saw the built environment as a tool for engineering more or less social interaction and, often being interested in building relationships and facilitating interaction between residents, they typically favoured utilising it for the former. For example, in Group F, small areas of open space were thought able to function as “congregation spaces” and their provision in residential areas was supported largely because of this (Elizabeth, Group F). Several groups favoured providing local shopping centres in residential areas partly because they were thought able to generate a sense of community and provide opportunities for

neighbours to interact. Since all participants were sufficiently interested in interacting with others to join a residents' group, be part of the management committee of that group and attend a focus group, it seems unsurprising that such a widespread preference for social interaction was identified.

Leafy locales

Across the majority of groups, a strong preference for green, leafy residential environments was identified. Groups claimed that greenspace supported mental and physical health and wellbeing, made areas attractive, provided places to relax and to exercise, formed spaces for social interaction and acted as a community focal point. They were thought especially important for families with young children providing a much needed space for play. There was, though, some concern that open space could become a site for anti-social behaviour and noise. Southampton was thought well supplied with areas of greenspace with participants feeling 'lucky', 'blessed' and 'spoilt' by the levels of provision. Describing their ideal town, several groups claimed it would be encircled by a ring of protected greenspace, Groups A and I favoured the provision of a large linear park bisecting their settlements, whilst Groups E and G spoke about using greenspace as a 'buffer' to separate (and insulate) housing from various non-residential uses.

Lower densities

Groups were unhappy with the perceived propensity for developers to build at higher densities, "the way they keep building, it's flats upon flats upon flats and without these greenspaces" (Judy, Group G). They felt that Southampton city centre had become

“overdeveloped” through the provision of new build flats: “it’s boxed in, I mean the sunlight goes” (Will, Group I). Developers and the planning system were blamed for encouraging this practice. Providing housing at high densities – specifically flats and small, tightly packed houses providing no private outdoor space - was uniformly seen as unappealing and problematic. It was linked to poor psychological and physiological health with participants arguing that residents needed space to “just be themselves” (Michelle, Group D) whilst “living conditions...have made people sicker because everyone’s living on top of each other and they feel pressured and stressed” (Kathy, Group A). In several groups, the roots of some varieties of anti-social behaviour were traced back to people being required to live in high density housing.

Spacious environments, characterised by houses with gardens, and plentiful areas of public greenspace, were thought by all groups to support health and wellbeing amongst all residents. They felt that planners should actively encourage detached and semi-detached houses with gardens: “we’re hoping that we will get back to people having gardens again...and that national [planning] policy won’t deprive the next generation of gardens” (Mathew, Group C). Only young, childless, affluent households, who were anticipated to be interested in living near work, shops, bars and leisure facilities, were thought liable to favour, and find satisfaction within, a high density environment such as a town or city centre.

Discussion: Residents’ groups’ preferences for walkable neighbourhoods

Residents’ groups’ tended to favour neighbourhoods that encouraged walking and supported physical characteristics and urban design factors commonly associated with walking. Connecting to some past research, a compact urban form (Levine and Frank, 2007),

local amenities (Song and Knaap, 2003), good pedestrian infrastructure (Levine and Frank, 2007) and greenspace (Kong et al., 2007) were favoured. It would appear, then, that groups may find much to like in the walkable neighbourhood. However, in line with many past studies, high density development (Song and Knaap, 2003; Koster and Rouwendal, 2012) and mixed use development (Senior et al., 2004) were widely and strongly disliked. Development of this type was thought likely to result in noise, disturbance and adverse effects on health and wellbeing. Amongst residents' groups, resistance to some aspects of the walkable neighbourhood therefore seems probable.

Lending support to the argument that individuals who prefer walking might self-select into more walkable neighbourhoods (Handy et al., 2006), there appeared to be a modest relationship between the walkability of a group's locale, preferences for walking and support for attributes of the walkable neighbourhood. Relative to those based in more walkable areas, groups located in less walkable areas were less likely to favour providing amenities within walking distance of housing and were more likely to strongly oppose any form of land use mix. The members of these groups were also less likely to want to walk to destinations and appeared more content to rely on their cars for any/all journeys.

Unsurprisingly, given their form and function, residents' groups appeared to interact with their neighbourhood principally from the standpoint of 'resident'. Consequently, 'good' neighbourhood design entailed addressing the needs and preferences of residential occupiers. Factors thought likely to harm residential amenity, such as high density development or fine grained land use mix, were roundly rejected. Whilst walkability mattered to these groups, steered by this standpoint, residential amenity took priority. This contrasts with the position found in walkable neighbourhood policy which promotes neighbourhood attributes

commonly associated with walking because of their perceived capacity or potential in this respect. This policy values environmental details, and supports their inclusion within a neighbourhood, because they are assumed to facilitate walking (see Southampton City Council's Development Design Guide (2004) and Residential Design Guide (2006)). In such policy, 'good' neighbourhood design entails addressing the anticipated needs and preferences of pedestrians; here walkability takes priority. With residents' groups and walkable neighbourhood policy differing in their points of interest/concern, a certain disconnect between the two seems inevitable with the environment favoured by one never wholly matching up to the environment favoured by the other.

Conclusion

This paper has presented a relatively novel approach to investigating residents' preferences for walkable neighbourhoods. Focus group discussions with 11 diverse residents' groups explored participants' environmental preferences. Five dominant preferences relating to local service provision, social interaction, noise, greenspace and density were identified. The relationships between these preferences and neighbourhood attributes commonly associated with walking were then explored. Positive interactions between these preferences and the considered attributes suggest that groups might find much to like in the walkable neighbourhood. Compared to an approach that focused exclusively on unpacking attitudes to factors related to walking, this technique produced a more comprehensive account of residents' groups' environmental preferences and afforded insights into preference strength. This facilitated a deeper understanding of why certain attributes might be liked or disliked. There seems scope to employ a similar approach to investigate preferences for other

contemporary planning and development issues such as tenure mix (Rowe and Dunn, 2015) and age-friendly design (World Health Organisation, 2007).

Finding connections to the ‘suburban ideal’ that Purcell (2001) identified amongst residents’ groups in America, the 11 groups included within the research were found to favour low density, green, peaceful environments, with small-scale local amenities placed within walking distance of housing. Reasonably constant preferences across and within residents’ groups suggests that certain dispositions to the built and natural environment might be common to many/most groups. This might raise the possibility that, in regards to planning and development matters, residents’ groups should be viewed as a single interest group with certain shared concerns rather than multiple separate interest groups with disparate concerns. This could have implications for the number of residents’ groups that policymakers and others should seek to include within the planning system’s formal participation arrangements and spaces.

Turning to the delivery of walkable neighbourhoods, the findings have three key implications. First, finding resident support, or support amongst a particular ‘type’ of resident, for many aspects of the walkable neighbourhood arguably strengthens the case for the creation of more walkable environments. Added to arguments based on environmental (Calthorpe, 1993), health (Frank et al. 2010) and social (Leyden, 2003) concerns could be an argument based on an appeal to residents’ preferences. Second, as public support is useful for gaining planning permission (Upreti and van der Horst 2004), evidence of resident support for walkable neighbourhoods could be used to further encourage developers to deliver more walkable environments. Such development could be presented as an easier ‘sell’. Third, evidence of some connection between the walkability of an individual’s neighbourhood and

support for environmental factors associated with walking suggests that support for walkable neighbourhood policy and development might be uneven. Support might be hardest to achieve in low density, single use residential areas. Tailored policies and concerted efforts might be required in these neighbourhoods.

Overall, the findings suggest that the vogue for more walkable neighbourhoods, found across governments, international bodies and popular theories of urbanism, might be cheered on by residents' groups from more walkable areas but opposed by those from less walkable locations.

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